



Constellation Energy Generation, LLC (CEG)
Byron Station
4450 N. German Church Road
Byron, IL 61010-9794
www.constellationenergy.com

November 16, 2023

LTR: BYRON 2023-0063
FILE: 1D.101

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Byron Station, Unit 2
Facility Operating License No. NPF-37
NRC Docket No. STN50-455

SUBJECT: Byron Station Unit 2 120-Day Inservice Inspection Report for Interval 4, Period 3, (B2R24)

The subject 120-Day Inservice Inspection Report for the Byron Station Unit 2, Refueling Outage Twenty-Four (B2R24) is being submitted pursuant to the requirements of Subsubarticle IWA-6230, "Owner's Activity Report" of Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code 2019 Edition as authorized by NRC approval of Constellation Fleet Relief Request RS-22-126, "Request to Use Provisions of a Later Edition of the ASME Boiler and Pressure Vessel Code, Section XI (IWA-6220 ("Owner's Repair/Replacement Certification Record"), IWA-6230 ("Owner's Activity Report"), and Mandatory Appendix II ("Owner's Record and Report"))".

This letter provides a copy of Form OAR-1 Owner's Activity Report for inservice inspection activities performed during the previous fuel cycle pursuant to the requirements of Subsubarticle IWA-6230. The report covers the inservice inspections conducted prior to and during the Unit 2 Fall 2023 refueling outage.

If there are any questions regarding this matter, please contact Ms. Zoe Cox, Regulatory Assurance Manager, at (815) 406-2800.

Respectfully,

A handwritten signature in black ink, appearing to read "Harris Welt".

Harris Welt
Site Vice President
Byron Generating Station

HW/JB/JA/hh

Enclosure

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number B2R24

Plant Byron Generating Station, 4450 North German Church Road, Byron, IL 6010

Unit No. 2 (if applicable) Commercial service date August 22, 1987 Refueling outage no. B2R24

Applicable inspection interval Fourth Inspection Interval (ISI), Third Inspection Interval (Containment ISI)
(1st 2nd 3rd 4th other)

Applicable inspection period Third Inspection Period (ISI and Containment ISI)
(1st 2nd 3rd)

Edition and Addenda of Section XI applicable to the inspection plans ASME Section XI, 2007 Edition through 2008 Addenda

Date and revision of inspection plans BYR-525537-01-RP04, Rev. 0, 07/29/16, Rev. 1, 01/04/17, Rev. 2, 08/10/18, ER-BY-330-1001, Rev. 0, 10/30/20, Rev. 1, 07/12/23

Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans N/A

Code Cases used for inspection and evaluation: N-432-1, N-508-4, N-513-3, N-513-4, N-513-5, N-516-4, N-516-5, N-526, N-532-5, N-552-1, N-561-2, N-561-3, N-562-2, N-569-1, N-578-1, N-586-1, N-593-2, N-597-2, N-597-3, N-600, N-613-2, N-629, N-638-7, N-638-10, N-639, N-641, N-643-2, N-648-1, N-648-2, N-651, N-653-1, N-653-2, N-660, N-661-2, N-661-3, N-666-1, N-695-1, N-696-1, N-705, N-705-1, N-706-1, N-711-1, N-722-1, N-729-6, N-731, N-733, N-735, N-747, N-749, N-751, N-754-1, N-762, N-762-1, N-765, N-766-1, N-766-3, N-768, N-770-5, N-771, N-773, N-775, N-776, N-778, N-786-1, N-786-3, N-789, N-789-2, N-789-3, N-798, N-800, N-803, N-805, N-809, N-823, N-823-1, N-824, N-825, N-829, N-830, N-831, N-831-1, N-838, N-839, N-843, N-845, N-845-1, N-847, N-848-1, N-851, N-853, N-854, N-858, N-864, N-865, N-867, N-869, N-874, N-877, N-878, N-879, N-880, N-882, N-885, N-889, N-890, N-892, N-893,

(if applicable)

Remarks See Attachment 1 to address the requirements of 10CFR50.55a(b)(2)(viii)(E) and (b)(2)(ix)(A)(2)

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct (b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of B2R24 (refueling outage number) conform to the requirements of the ASME Code, Section XI

Signed J. B. Hansen / Joe Beckman, Byron ISI Prog Owner Date 11/9/2023
(Owner or Owner's Designee Title)

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by The Hartford Steam Boiler Inspection and Insurance Company of Hartford, Connecticut have inspected the items described in this Owner's Activity Report and state that to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of the ASME Code, Section XI

By signing this certificate, neither the Inspector nor the Inspector's employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluations described in this report. Furthermore, neither the Inspector nor the Inspector's employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

James W. Kierny Commission NB11622 INR 1LQ17431C
(Inspector's Signature) (National Board Number and Endorsement)

Date 9 NOV 23

FORM OAR-1 OWNER'S ACTIVITY REPORT (Cont'd)

**Table 1
Items With Flaws or Relevant Conditions That Required
Evaluation for Continued Service**

Examination Category and Item Number	Item and Flaw or Relevant Condition Description	Evaluation Description
F-A / F1 20C	SUPPORT CONSTANT FOR LINE 2FW87CD-6IN / Out of Tolerance Settings on Spring Can	IR#04709197 - B2R24 - Relevant Condition on 2FW09002C Pipe Support

**Table 2
Abstract of Repair/Replacement Activities Required
for Continued Service**

Code Class	Item Description	Description of Work	Date Completed	Repair/Replacement Plan Number
2	2CV8368B, 2B RCP 2RC01PB SEAL WTR INJ OMB ISOL CHK VLV	Seal weld cap to valve body to prevent recurring leakage	10/19/2023	05260984-01

ATTACHMENT 1

CYCLE 24 INCLUDING B2R24 ISI (IWE/IWL) RESULTS

B2R24 CONTAINMENT ISI IWE ACTIVITIES

During the B2R24 outage, examinations were completed for the Unit 2 containment liner to comply with the requirements of IWE-2400. Examinations were completed and documented under WO#05266816.

As a result, the provisions of 10CFR50.55a(b)(2)(ix)(A)(2) for metal containment examinations have been reviewed for applicability to the B2R24 examinations performed, and no conditions were identified in accessible areas that would indicate the presence of or could result in degradation to inaccessible areas.

UNIT 2 CYCLE 24 CONTAINMENT ISI IWL ACTIVITIES

No IWL examinations were completed during Unit 2 Cycle 24. The provisions of 10CFR50.55a(b)(2)(viii)(E) for concrete containment examinations has been reviewed and is not applicable to exams completed during this fuel cycle.